

Publication

EP 0863415 A3 19981014

Application

EP 98400535 A 19980306

Priority

JP 5297997 A 19970307

Abstract (en)

[origin: EP0863415A2] A base polymer is mixed with a non-polymerizable compound having a higher refractive index to form a fiber material. This material is continuously transformed into a fiber (5) in a fiber-preparing unit (1). The fiber is dipped in diffusion tanks (T1 ... Tn) containing a monomer (9) so as to diffuse the monomer into the fiber, and cured in a heater (15) so as to polymerize the monomer (9). By alternately repeating this procedure, the monomer (9) and the non-polymerizable compound are diffused in the fiber (5) and form a graded refractive index. Next, the fiber is drawn, coated with a cladding and coiled. This method can be performed with a high running ratio, minimizing the necessity of scaling-up of the facilities when the production is increased, and easily confers a desired index grading on the fiber. Likewise, the method allows manufacturing continuously, an graded-index plastic optical-fiber (3) with a desired length and of constant quality. <IMAGE>

IPC 1-7

G02B 6/16

IPC 8 full level

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CPC (source: EP US)

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